

***IMPACT OF DIE ON GLASS CEILING AND SUSTAINABLE CARRIER PROGRESSION;
A CASE OF FEMALE ATHLETES IN PAKISTAN***

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Abstract

As we know that the women despite contributing up half of the global population, women still face multiple barriers to success, such as the glass ceiling and sustainable career growth. It relates to the invisible barriers to career success that women face at work. The purpose of this empirical study is to focus on relationship between to analyze the impact of DEI on Glass Ceiling and sustainable carrier progression; a case of female athletes in Pakistan. The data was collected using self-administered questionnaires from the respondents belonging to the female athletes of Lahore. A sample of 236 female athletes was selected for data collection and survey was based on close ended questions. Data was analyzed using SPSS through correlation and regression analysis. The result indicates that there is positive relationship between DIE on Glass Ceiling and Sustainable Carrier Progression. The main limitation of this study was lack of time, lack of resources, small sample size and only focus on one city's respondents.

Key words: *Diversity, Inclusion, Equity, Glass Ceiling, Socio-cultural Norms, Sustainable Carrier Progression, Female Athletes.*

1. Introduction: -

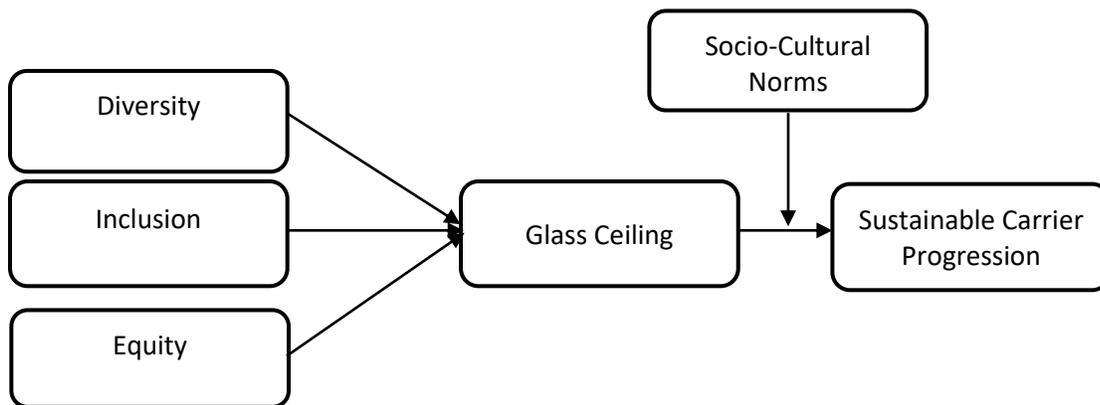
In Pakistan, sports have enormous cultural, social, and symbolic significance and a source of discipline, unity, and national identity. Sport serves as a platform for cultural expression, leadership development, and social change in along with physical competition. Millions of young women are inspired to play sports by female athletes, who have a special role in challenging gender norms and achieving the objectives of gender equity. Increasing awareness and involvement not only promotes athletic success but also enhances goals such as social integration, leadership representation, and empowering women. Despite the global focus on gender equality, women in sports seem to face institutional and cultural hurdles that restrict their professional development. In order to address these disparities through representation, inclusive corporate cultures, and equitable access to resources and decision-making, Diversity, Inclusion, and Equity (DIE) frameworks have grown in importance in recent years. Even having comparable or superior training and experience, women are still unable to advance to higher

executive positions due to the glass ceiling. According to research, women's underrepresentation in leadership positions is more likely to be caused by systemic bias, gender stereotypes inside organizations, a lack of mentoring, and exclusion from significant groups than by a lack of competence. However their successes, women's involvement and development in sports are still extremely low. The DIE principles offer a comprehensive framework for addressing these differences. A diversity focuses on the representation of individuals from a range of gender, sociocultural, and societal backgrounds, equity focuses on fair access to resources, opportunities, and decision-making authority based on need rather than similarity; inclusion focuses on organizational cultures and practices that promote respect, encouragement, and participation (F. Cunningham et al., 2019). According to structural point of view, DIE encourages modifications to the organizational rules, governance structures, leadership styles, and cultural norms of sports organizations. The glass ceiling continues to limit women's progression in sports-related professions despite changes. Regardless of their performance, experience, or qualifications, talented women are unable to advance to higher leadership and decision-making levels due to the invisible but persistent structural barrier known as the "glass ceiling" (L. J. Burton, 2015a). This barrier is strengthened in sports organizations by biased promotion procedures, socializing techniques, male-dominated organizational systems, and gendered perspective on leadership. Women remain insufficiently represented in leadership and strategic positions in the sports industry, but the fact that conversations about gender equality are spreading around the world. Empirical research show that women face different hurdles in their jobs compared to their male colleagues. The glass cliff, where women are frequently elevated to leadership positions only in times of crisis; the glass ceiling, which restricts women to executive roles within an organization; and a weak structure, which contributes to women giving up their careers at different stages because they have few opportunities to succeed (Kane & LaVoi, 2018a). These difficulties are carried out by structural elements such a lack of mentoring, a lack of role models, inadequate institutional support networks, and unequal family and caring duties. Also, societal gender stereotypes may cause women to underestimate their leadership potential, which reduces their chances of obtaining or retaining leadership roles. Furthermore, lack of education or skill is not the reason why women are underrepresented in leadership positions in sports. Meanwhile, data indicates that there is a large pool of skilled female talent, with women progressively greater than males in sport administration and associated academic programs (A. M. Burton, 2015a). Therefore, discriminatory workplace norms, uneven opportunities, and a lack of organizational engagement to gender equity are the basis of the current issue. Due to non-inclusive leadership approaches and unequal human resource procedures, women's leadership potential is frequently undervalued. It is unequal and a barrier to organizational success to exclude diversity, inclusion, and equity. Research indicates that organizations with gender-diverse leadership usually experience higher levels of innovation, better decision-making, moral governance, and long-term sustainability (Fogarty et al., 2007). Organizations in the sports industry that are welcoming and equitable have the ability to handle stakeholder demands, fulfill their reputation, and achieve long-term success. (G. B. Cunningham & Melton, 2011a) believe that promoting equal opportunity may provide a welcoming environment for diversity, which enhances dedication and productivity inside an organization. The sports organizations that refuse the systemic changes required to enable women to dominate leadership positions.

In Pakistan, gender bias in institutions, cultural concerns, and societal norms are complex problems that are faced by women. Availability of training facilities, funding, sponsorship, networking and leadership development opportunities is sometimes difficult for female athletes. Therefore, instead of an organizational problem, the challenges preventing women from participating in Pakistani sports are part of a larger systemic problem with roots in governance structures, policy frameworks, and cultural norms. This study investigates how Pakistani female athletes' capacity to face these barriers and succeed in their careers may be impacted by diversity, inclusion, and equity.

By addressing core values like institutional rules, leadership structures, resource availability, and organizational culture, this paper focuses to determine how removing structural barriers to diversity, inclusion, and equity practices can preserve long-term career paths for women in sports. As a result of providing evidence-based recommendations to policymakers, sports federations, and governing bodies within the sports sector, the study will contribute both theoretically to the current field of research regarding gender and sport management in struggling nations. In the end, the successful implementation of the DIE concepts could encourage the maintaining of a more sustainable and equitable sports system in Pakistan, that recognizes women's leadership potential as well as their ability to compete.

Theoretical Framework: -



2. Literature Review: -

Over the years, sports organizations have developed into diverse structures with social norms, principles of leadership, and power dynamics (Acker, 1990). Feminist critics claim that sport is a mirror of society at large, with men at the top and women at the bottom or serving as assistants (Messner, 2002). With the fact that more women engage in sports worldwide, the proportion of women in leadership, governance, and policy-making positions remains the same (Peachey et al., 2015). The difference indicates that women's inadequate promotion prospect in sports is due to institutional rather than individual factors. Sport is still firmly integrated with dominant societal institutions that maintain traditional gender stereotypes in a developing nation like Pakistan. Cultural norms that restrict women's access to and persistence in sports-related careers include modesty, family responsibilities, and social visibility (Gul, 2021). Because of this, female

athletes frequently encounter structural barriers that limit both their athletic growth and their post-competition professional opportunities.

In order to address the problem of systemic inequalities, the concepts of Diversity, Inclusion, and Equity (DIE) became dominance position in writing on organizational and sport management. Diversity related with representation in terms of gender, ethnicity, and social background; inclusion is related with circumstances in organizations where people feel acknowledged and appreciated; and equity is related with equitable distribution of opportunities and resources based on need rather than uniformity (G. B. Cunningham, 2019a). In research perspective, better organizational commitment, inventiveness, and ethical governance are traits of sport organizations that are proactive in implementing the DIE rules (Fink, 2016). In order to support women in their careers, inclusive workplaces provide mentorship, leadership development with visible promotion opportunities. However, without changing organizational structures, the majority of sporting institutions adopt symbolic or cosmetic diversification efforts, which results in progressively decreasing gender equity (Shaw & Frisby, 2006).

The term "glass ceiling" refers to the unseen but persistent barriers that prevent women from advancing to senior leadership positions, regardless of their background and performance (Burke & McKeen, 1995). Male-dominated networks, biased evaluation criteria, and gendered leadership expectations that correlate strength and competence with masculinity all contribute to the glass ceiling in sports (L. J. Burton, 2015b). According to empirical research, women are severely underrepresented in senior leadership roles across global sports, such as coaching, administration, and governance (LaVoi & Dutove, 2012a). According to (Kane & LaVoi, 2018b), women are often given lower ratings than males and are only given leadership positions when an organization is experiencing an unpredictable phenomenon known as "glass cliff." Institutional bias, and inefficiency, is the root causes of gender based biases. Scholars choose symbolic representations such as the glass cliff, sticky floor, and weak system to describe women's career turnover in sports. Women who quit their careers at different stages due to work-family conflict, lack of support, and lack of growth are an example of the "weak system" (A. M. Burton, 2015b). According to (Ryan & Haslam, 2005) the glass cliff encourages women to be at the top with a significant risk of failure, while the floor stickiness enables women to remain in entry-level or middle-management positions with very little opportunity of development. The absence of sponsorship, mentorship, and role models causes these challenges. In male-dominated leadership circles, women in sports typically lack access to strong mentors, despite the fact that mentoring is recognized as one of the essential components of leadership development (Norman, 2010). Women's confidence in their careers is limited by this institutional discrimination, which also reduces their opportunities to pursue leadership roles.

The concept of long-term career growth including components of reliability, flexibility, stability, employability, work-life balance, and psychological well-being is known as sustainable career progression (De Vos et al., 2020a). Sustainable careers for female athletes emphasize not only their athletic success but also their post-sport professions in leadership, coaching, administration, or government. According to a research, institutional barriers such uneven access to leadership, finances, training, and organizational support have a negative impact on women's sustainability in sports careers (Cunningham and Singer, 2010). In the absence of equitable structures, female athletes either retire prematurely or completely stop participating in sports. Despite this, DIE-focused groups provide chances for athletes to remain longer and succeed in

their careers after retirement. Gender equity in leadership offers several organizational benefits in addition to the social justice component. According to research, organizations with a varied staff in terms of gender in leadership roles perform better in terms of innovation, decision-making, ethical governance, and long-term sustainability ((Desvaux et al., 2007a); (G. B. Cunningham & Melton, 2011b)). In sports, inclusive leadership may improve an organization's credibility and adaptability for multiple stakeholders. With these advantages, sports organizations continue to be opposed to structural change, particularly in male-dominated cultures. This conflict highlights the need for particular research that inquires as how DIE practices might help to overcome the glass ceiling and promote long-term career success, which is particularly important in understudied contexts like Pakistan.

Over the years of empirical studies have examined the combined impact of diversity, inclusion, and equity on the decrease of the glass ceiling and the long-term career advancement of female athletes in Pakistan, besides the fact that gender inequality in sport leadership is extensively discussed across globally. Instead of focusing on leadership results or career sustainability, the present literature tends to emphasize the feature of involvement. This study closes this gap by examining the structural mechanisms that the DIE uses to support career advancement in developing-nation sports.

3. Methodology: -

This study adopting a quantitative, cross-sectional research design and deductive method for analysis. The empirical data was appropriate for using a quantitative technique to investigate the empirical relationships between systemic aspects (Levitt et al., 2018). Statistics regarding Pakistani female athletes who have participated or were competing at the national, provincial, university, or even professional levels was gathered using a systematic self-administered questionnaire. Purposive and snowball sampling was used to choose individuals with practical knowledge of sports organizations and career systems. According to the study, a sample size of 236 respondents seemed enough to attain both statistical analysis and generalizability ((Hair et al., 2019)). Each of the variables were measured using validated scales derived from earlier research. Equal hiring processes, an inclusive workplace culture, equitable access to resources, and participation in decision-making were used to evaluate diversity, inclusion, and equality (H. Cunningham et al., 2011). The glass ceiling based on challenges to growth, gender bias, a lack of mentorship, and organizational discrimination were among the indicators evaluated (Smith et al., 2012). Career consistency, growth in leadership prospects, career satisfaction, work-life balance, and long-term stability were among the variables used to evaluate sustainable career growth (De Vos et al., 2020b). A five-point Likert scale (like strongly agree = 5 to strongly disagree = 1) was used to record the responses. SPSS was used to analyze the data. Reliability, validity, and descriptive statistics analysis were done before hypothesis testing. Correlation, regression, mediation and moderation analysis were done after hypothesis testing.

In order to check the validity of questionnaires related to quality questions, measuring variables extracted from theoretical background and checked by expert.

4. Results & Analysis: -

5.1 Demographic Profile:

According to the demographic analysis, the sample group is mostly made up of young, female athletes in the early stages of their careers, with the majority of respondents in the 21–30 age range and a slightly smaller percentage having fewer than 20. It is lowest in the 31–40 age range

and insignificant after 40, suggesting low long-term participation of women in competitive sports. Because all of the respondents are female, the study's focus on gender-specific structural barriers is interconnected. Since the majority of the sample had bachelors and master's degrees, it is unlikely that a lack of education and abilities will be the reason for a lack of career-related opportunities. Since most of the respondents are single, a significant number of the respondents are married, making work-life balance a relevant issue. The sports that the participants engage in are numerous, but the most popular ones are hockey and athletics. They are mostly university students and then club members. Most respondents have claimed that they have less than ten years of playing experience, which suggests that the issues of inclusiveness, equity, and career sustainability are especially high during the early to mid-career stage.

5.2 Reliability Statistics:-

Table 1

Reliability Statistics

Cronbach's Alpha	N of Items
.927	42

Interpretation:

The level of internal consistency as indicated in the analysis of reliability by a Cronbach alpha of 0.927 indicates that the consistency of the 42-item questionnaire is satisfactory. This is more than the commonly accepted high reliability value and is adequate to testify to the consistent measurements of the main components of the study by the items. The alpha value indicating that the instrument is conservative and dependable and the questionnaire items are very coherent. As a result, this survey considered as reliable, and they provide a reliable basis for drawing further statistical conclusions and testing hypotheses.

5.3 Descriptive Statistics and Correlation Analysis:-

Table 2

Descriptive Statistics and Correlation Analysis

S. #.	Variables	n	M	SD	1	2	3	4	5	6
1	Diversity	236	3.6425	.71647	1					
2	Inclusion	236	4.0280	.56785	.229*	1				
3	Equity	236	3.8589	.72579	.153*	.820**	1			
4	GC	236	1.9644	.56275	.265*	.517**	-.544**	1		
5	SCN	236	3.861	.66176	.084	.413**	.360**	-.548**	1	

6	SCP	236	4 3.744 6	.85924	.095	.732**	.881**	-.462**	.176**	1
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**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Interpretation:

According to descriptive statistics and Pearson correlation analysis, 236 female athletes' diversity, inclusiveness, equity, glass ceiling (GC), sociocultural norms (SCN), and sustainable career progression (SCP) were examined. Perceptions of equality (M = 3.86) and inclusion (M = 4.03) have high mean values, but the glass ceiling has a comparatively low mean (M = 1.96). Additionally, there is a high positive relationship between SCP and both inclusion and equity (r = .82, p < .01), with equity having the strongest correlation (r = .88, p < .01). Each of the elements of diversity and SCP is negatively and strongly correlated with the glass ceiling, suggesting that the more dominant DIE practices and favorable sociocultural norms, the fewer challenges female athletes have in their careers

5.4 Simple Regression:-

Table 3

Regression Coefficients of Diversity on GC

Variable	B	β	SE	t	p
Constant	2.722		0.184	14.813	0.000
Diversity	-0.208	-0.265	0.050	-4.203	0.000

$R^2 = .066$, $F = 17.666$, $N=236$, $P<0.05$

Interpretation:

According to regression analysis, diversity and the glass ceiling are significantly and negatively correlated ($\beta = -.265$, p < .001). The model explains 6.6% of the variation ($R^2 = .066$) and is statistically significant ($F = 17.666$, p < .05). In women athletes, lower glass ceiling barriers are associated with more perceived diversity.

The Simple Regression Equation is shown below:

Glass Ceiling (Y) = Constant + Diversity(X)

$Y = 2.722 + (-0.208) X$

Table 4

Regression Coefficients of Inclusion on GC

Variable	B	β	SE	t	p
Constant	4.029		0.226	17.866	0.000

Inclusion	-0.513	-.517	0.055	-9.246	0.000
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$R^2 = .264, F = 85.487, N=236, P<0.05$

Interpretation:

According to regression analysis, inclusion and the glass ceiling are significantly and negatively correlated ($\beta = -.513, p <.001$). The model explains 26.4% of the variation ($R^2 =.264$) and is significant ($F = 85.487, p <.05$). Higher levels of inclusiveness are associated with much less perceived career hurdles for female athletes. In women athletes, lower glass ceiling barriers are associated with more perceived inclusion.

The Simple Regression Equation is shown below:

Glass Ceiling (Y) = Constant + Inclusion(X)

$Y = 4.029 + (-0.513) X$

Table 5

Regression Coefficients of Equity on GC

Variable	B	β	SE	t	p
Constant	3.592		0.167	21.515	0.000
Equity	-0.422	-0.544	0.043	-9.920	0.000

$R^2 = .293, F = 98.413, N=236, P<0.05$

Interpretation:

According to regression analysis, equity and the glass ceiling are significantly and negatively correlated ($\beta = -.422, p <.001$). The model explains 29.3% of the variation ($R^2 =.293$) and significant, because perceived career restrictions among female athletes are inversely correlated with increased equity.

The Simple Regression Equation is shown below:

Glass Ceiling (Y) = Constant + Equity(X)

$Y = 3.592 + (-0.422) X$

Table 6

Regression Coefficients of GC on SCP

Variable	B	β	SE	t	p
Constant	5.129		0.181	28.355	0.000
GC	-0.705	-0.462	0.089	-7.961	0.000

$R^2 = .210, F = 63.385, N=236, P<0.05$

Interpretation:

According to regression analysis, glass ceiling is a substantial and negative predictor of SCP, negatively correlated ($\beta = -.462, p <.001$). The model explains 21.0% of the variation ($R^2 =.210$)

and significant which shows that higher perceived professional hurdles reduce career sustainability among female athletes.

The Simple Regression Equation is shown below:

$$SCP (Y) = \text{Constant} + GC (X)$$

$$Y = 5.129 + (-0.705) X$$

5.5 Multiple Regressions:-

Table 7

Regression Coefficients of Diversity, Inclusion, Equity, GC on SCP

Variable	<i>B</i>	β	<i>SE</i>	<i>t</i>	<i>p</i>
Constant	-.337		.236	-1.033	.303
Diversity	-.051	-.043	.039	-1.312	.191
Inclusion	.069	.045	.084	.821	.413
Equity	1.019	.861	.066	15.377	.000
GC	-.029	.019	.058	.501	.617

$$R^2 = .775, F = 203.876, N=236, P<0.05$$

Interpretation:

The relationship between diversity, inclusion, equity, and the glass ceiling (GC) in supporting sustainable career progression (SCP) among 236 female athletes was examined using multiple regression analysis. The model explains a considerable portion (77.5%) of the variation ($R^2 = .775$) in SCP and is statistically significant ($F = 203.876, p < .05$). Equity is the strongest and only significant positive predictor ($\beta = .861, p < .001$) among the variables, indicating the importance of equal policies in maintaining a female athlete's career. The lack of significant direct impacts of diversity, inclusion, and GC in the combined model does not suggest that equity mediates or distorts the impact of these variables on SCP. These findings indicate that the importance of equity is for promoting long-term professional growth in sports organizations.

The Multiple Regression Equation is shown below:

$$SCP (Y) = \text{Constant} + \text{Diversity}(X) + \text{Inclusion}(X) + \text{Equity}(X) + \text{GC}(X)$$

$$Y = (-0.337) + (-0.051) X1 + (0.069) X2 + (1.019) X3 + (-0.029) X4$$

Table 8

Regression Coefficients of Diversity x Inclusion on SCP

Variable	<i>B</i>	β	<i>SE</i>	<i>t</i>	<i>p</i>
Constant	2.104		1.876	1.121	.263
Diversity	-.754	-.629	.476	-1.583	.115
Inclusion	.487	.322	.467	1.045	.297

Diversity x Inclusion	.164	.774	.117	1.400	.163
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$R^2 = .539$, $F = 92.488$, $N=236$, $P<0.05$

Interpretation:

Regression Analysis results to examine the interaction relation between diversity and inclusion and SCP in 236 female athletes. Although the main effects of diversity ($\beta = .629$, $p = .115$), inclusion ($\beta = .322$, $p = .297$), and the interaction ($\beta = .774$, $p = .163$) are not significant, the model is significant ($F = 92.488$, $p = .05$) and explains 53.9% of the variance ($R^2 = .539$). The positive value of the interaction term suggests that diversity and inclusion may have a combined impact. These results suggest that the durability of female athletes' careers may still be mainly determined by equity.

Table 9

Regression Coefficients of Diversity x Equity on SCP

Variable	<i>B</i>	β	<i>SE</i>	<i>t</i>	<i>p</i>
Constant	3.036		1.136	2.673	.008
Diversity	-.869	-.724	.292	-2.970	.003
Equity	.239	.202	.290	.824	.411
Diversity x Equity	.209	1.043	.074	2.823	.005

$R^2 = .783$, $F = 283.733$, $N=236$, $P<0.05$

Interpretation:

Regression Analysis results to examine the interaction relation between diversity and equity and SCP in 236 female athletes. The interaction between diversity and equitable practices has a combined impact on SCP due to it is significant at the.005 level ($F = 283.733$) and has a significant positive value ($\beta = 1.043$, $p = .005$). The fact that diversity and equity will positively interact suggests that diversity and high equity can significantly contribute to the professional sustainability of the career, even though the effects of diversity alone ($\beta = -.724$, $p = .003$) and equity alone ($\beta = .202$, $p = .411$) are not significant. These results indicate that in order to support female athletes' long-term professional growth, sports organizations must include diversity and equity initiatives.

Table 10

Regression Coefficients of Equity x Inclusion on SCP

Variable	<i>B</i>	β	<i>SE</i>	<i>t</i>	<i>p</i>
Constant	-1.223		.785	-1.558	.121
Equity	1.244	1.051	.208	5.985	.000
Inclusion	.277	.813	.220	1.260	.209

SCP						
Direct Effect of Div on SCP	-.0353	.0722	-.4891	.6252	-.1777	.1070
Indirect Effect of Div on SCP through GC	.1492	.0357			.0876	.2237

Note. Div (X) represents Diversity, SCP (Y) represents Sustainable Carrier Progression, and GC (M) represents Glass Ceiling, SE = Standard Error; CI = Confidence Interval.

Interpretation:

The mediation analysis among 236 female athletes about the impact of diversity on SCP, through the GC. Both the direct influence (Estimate = .035, p = .625) and the overall effect of variety on SCP are not significant (Estimate = .114, p = .146). However, the indirect effect through GC is substantial (Estimate = .149, 95% CI [.088,.224]), indicating that diversity has an indirect effect on long-term career development by lowering the perception of the glass ceiling barrier. These results indicate that diversity may not always result in professional success on its own; it is an essential factor in removing institutional barriers, which eventually helps female athletes succeed in their careers.

Table 13

Mediation Analysis of the Effect of Inclusion (X) on Sustainable Carrier Progression (Y) through Glass Ceiling (M)

Variables	Estimate	SE	t	p	95% Confidence Interval	
					Lower	Upper
Total Effect of Inc on SCP	1.1070	.0674	16.4163	.000	.9742	1.2399
Direct Effect of Inc on SCP	1.0181	.0782	13.0262	.000	.8641	1.1721
Indirect Effect of Inc on SCP through GC	.0889	.0435			.0036	.1746

Note. Inc (X) represents Inclusion, SCP (Y) represents Sustainable Carrier Progression, and GC (M) represents Glass Ceiling, SE = Standard Error; CI = Confidence Interval.

Interpretation:

The mediation analysis among 236 female athletes about the impact of inclusion on SCP, through the GC. Both the direct (Estimate = 1.018, p <.001) and overall (Estimate = 1.107, p <.001) effects of inclusion on SCP are significant, indicating that inclusion is a significant cause of career sustainability. By reducing the perceived glass ceiling effects, inclusion also promotes sustainable career growth, as evidenced by the significant indirect effect of GC (Estimate =

0.089, 95% CI [0.004, 0.175]). These findings suggest that structural barriers to female athletes are eliminated; inclusive policies have a favorable impact on both career success and growth.

Table 14

Mediation Analysis of the Effect of Equity (X) on Sustainable Career Progression (Y) through Glass Ceiling (M)

Variables	Estimate	SE	t	p	95% Confidence Interval	
					Lower	Upper
Total Effect of Equ on SCP	1.0434	.0366	28.5368	.000	.9741	1.1154
Direct Effect of Equ on SCP	1.0598	.0436	24.2910	.000	.9738	1.1457
Indirect Effect of Equ on SCP through GC	-.0164	.0296			-.0751	.0428

Note. Equ (X) represents Equity, SCP (Y) represents Sustainable Career Progression, and GC (M) represents Glass Ceiling. SE = Standard Error; CI = Confidence Interval.

Interpretation:

The mediation analysis among 236 female athletes about the impact of equity on SCP, through the GC. Both the direct impact (Estimate = 1.060, $p < .001$) and overall impact (Estimate = 1.043, $p < .001$) of equity on SCP are substantial, indicating that equity is a significant predictor of career sustainability. The impact of equity on SCP is not mediated by the glass ceiling (Estimate = 0.016, 95% CI = [0.075, 0.043]), suggesting that the indirect effect through GC is not mediated by the glass ceiling. This highlights the reality that, despite structural barriers known as the "glass ceiling," career results are closely related to equity.

5.7 Moderation Analysis:-

Table 15

Moderation Analysis of the Effect of GC (X) on SCP (Y) through SCN (W)

Variables	Estimate	SE	t	p	95% Confidence Interval	
					Lower	Upper
Constant	4.4105	.8850	4.9837	.0000	2.6669	6.1542
Total Effect of GC on SCP	-.0466	.3947	-.1181	.9061	-.8242	.7309
Direct Effect of SCN on SCP	.2785	.2316	1.2026	.2304	-.1778	.7348
Indirect Effect of GC	.2235	.1133	-1.9725	.0497	-.4467	-.0003

on SCP through SCN

Note. GC (X) represents Glass Ceiling, SCP (Y) represents Sustainable Career Progression, and SCN (W) represents Socio-cultural Norms. SE = Standard Error; CI = Confidence Interval.

Interpretation:

The moderation analysis on the relationship between the GC and SCP among 236 female athletes and the presence of socio-cultural norms (SCN). Both the direct effect of SCN on SCP (Estimate = 0.279, $p = .230$) and the overall effect of GC on SCP (Estimate = 0.047, $p = .906$) are not significant. However, the indirect effect is marginally significant (Estimate = 0.224, $p = .050$, 95% CI [0.447, 0.0003]), indicating that the impact of the glass ceiling on career sustainability is partially moderated or modified by sociocultural norms. The findings show that the influence of structural challenges on female athletes' career progression is significantly moderated by cultural context.

5. Discussion: -

The impact of diversity, inclusion, and equity (DIE) on the glass ceiling and sustainable career progression (SCP) among Pakistani women athletes has been examined in the current study. The findings provide insightful information on how organizational and cultural problems, especially those resulting from systemic limitations and conventional gender norms, effect career decisions. This research concludes that equality is a crucial factor for long-term career growth, aligning with past studies (Desvaux et al., 2007b); G. B. Cunningham & Melton, 2011c). This means that female athletes are in a significant chance of achieving a long-term career development as long as they feel that they can get equal chances to opportunities, resources, and leadership opportunities. The relationship of DIE practices is exhibited by the fact that equity does not only directly develop on SCP, but reinforces the advantages of diversity and interaction when added (G. B. Cunningham, 2019b). The influence of inclusion on the glass ceiling perception was significant, and is in line with the previous researches indicates the necessity of inclusive environments to reduce the effects of barriers faced by women in sports imposed due to their structures ((L. J. Burton, 2015c); Kane & LaVoi, 2018c). By making sure that athletes feel inclusion encourages leadership because it is a way of making a decision in an organization that is well appreciated, respected and involved professional development and professionalism. The impact of the diversity was not such significant on SCP, but equity enhanced it positively, implicating that the representation is not necessarily enough to reduce the barriers without fair organizational structures. According to (LaVoi & Dutove, 2012b), suggest the required improvement in the structural changes, mentorship, and policy interventions, which will enhance its representation and the other element glass ceiling was mediating the diversity and inclusion indirectly affecting sustainable career success through minimizing perceived structural challenges. This is consistent with the glass cliff and leaky pipeline theories discussed in the literature on sport management (L. J. Burton, 2015d); Kane & LaVoi, 2018d), according to which women are often denied opportunities to advance despite having comparable skills and abilities. Furthermore, equity has an independent effect on SCP, which is mediated by the glass ceiling.

This implies that to empower female athletes, they should have equal opportunities and resources. The moderation analysis also considers the effects of the social cultural norms (SCN)

on the success of the careers. The effect of SCN plays a significant role in the investigation of the cultural environment in Pakistan, where traditional gender roles and social norms still limit the involvement of women and their leadership in sport, despite its mediating effect being insignificant ((Khan et al., 2020a); (Shaikh et al., 2023a)). This finding is in line with the number of studies conducted worldwide that to ensure the success of inclusive and equitable policies, they have to consider the local socio-cultural context ((G. B. Cunningham, 2019c) ;G. B. Cunningham & Melton, 2011d). Overall, these findings indicate the theoretical and practical significance of DIE in the sports organizations. Through the DIE programs, the institutional and cultural restrictions would be minimized, leadership representation was going to be encouraged, and the career of Pakistani female athletes would be supported. The comprehensive work on gender equity in sports have already existed, and the current study is similar because it focuses on the importance of both safe systems that can ensure equal access to opportunities and resources and policies that can make sports diverse and inclusive ((Desvaux et al., 2007c); Kane & LaVoi, 2018e). DIE concepts can be used to promote long term careers in Pakistani sports groups. Some of the strategies that may be used to minimize the glass ceiling effect are transparent decision-making, clear promotion policies, mentorship programs, and interventions that are culturally competent. To achieve a sustainable change, educating coaches, administrators, and legislators as to the effects of DIE on the career development of female athletes is also essential.

The study has limited useful findings due to the cross-sectional design limitation that limits the causal inference. Future studies may use a mixed-methods or longitudinal design to capture the dynamic nature of career growth. Examining various Pakistani athletic fields and geographical areas might also provide greater clarity to the possibilities and unique difficulties associated with each circumstance. In summary, the study highlights how crucial DIE practices especially equality and inclusion are to eliminating the glass ceiling and ensuring Pakistani female athletes' long-term professional development. In order to create more progressive and inviting sports organizations that would enable women to fully engage in the development of both sport and society, the research investigated how these procedures may be utilized to overcome structural and societal barriers.

6. Conclusion: -

This study evaluated the potential implications of diversity, inclusion, and equality (DIE) to overcome the glass ceiling and sustainable career progression (SCP) among Pakistani female athletes. The results demonstrate that while diversity by itself has little direct impact but enhances professional development when paired with equity, inclusion and equality are essential for long-term professional success. Additionally, this study demonstrates that social barriers exist and that diversity plays a mediating role in terms of the glass ceiling. These barriers remain a major prevent to career success, however despite these challenges, equality encourages professional development.

The moderating impact caused by sociocultural norms emphasizes how important Pakistan's cultural circumstance is in determining female athletes' professional experiences. In conclusion, the research highlights the need of ensuring and improving the sustainability of long-term sports careers by institutional and cultural changes that integrate Diversity, Inclusion, and Equity (DIE) policies in order to lower gender-related issues. The results are consistent with earlier research that emphasized the value of equal opportunities, mentorship, and inclusive policies in

minimizing gender inequity and encouraging women in leadership positions ((L. J. Burton, 2015e); (Kane & LaVoi, 2018e); (Desvaux et al., 2007d); (G. B. Cunningham & Melton, 2011e). In sports, they emphasize the necessity of strategies and initiatives based on Pakistani sociocultural elements that prevent women from participating in leadership roles ((Khan et al., 2020b); (Shaikh et al., 2023b)). Sports organizations in Pakistan have to implement DIE measures, including mentorship programs, inclusive leadership, and fair promotion strategies. To determine the current barriers experienced by women in sports are resolved, administrators and legislators must get to remove barriers, motivate women for pursuing professions in sports, and take on administrative responsibilities. They must also promote sports as an inclusive sector in society. In summary, addressing over the fundamental problem of equality, encouraging diversity, inclusivity, and equity for Pakistani female athletes is an essential strategic concern for improving career sustainability. If organizational and societal problems are successfully addressed, the sports sector has the ability to sustain a more professional, equitable, and encouraging workplace culture where female leadership is acknowledged and their skills and abilities are appreciated.

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